

REMARKS

Claims 5-7 and 17 have been amended. Claim 20 has been added. Claims 1, 5-7, 11-13 and 15-20 remain for further consideration. No new matter has been added.

The objections and rejections shall be taken up in the order presented in the Official Action.

1. Claim 1 currently stands rejected under 35 U.S.C. §102 for allegedly being anticipated by the subject matter disclosed in U.S. Patent 6,215,297 to Bleckmann et al (hereinafter "Bleckmann").

Claim 1 recites a method that includes:

“comparing the amplitude of the pulses of the pulse train output signal with a first variable switching threshold value; and
adjusting said switching threshold value when the difference between the amplitudes of the pulses and said switching threshold value exceeds a fixable first maximum value.” (cl. 1, emphasis added).

Significantly, claim 1 recites comparing the amplitude of the received pulse and the threshold value, and adjusting the value of the threshold when the difference between the amplitudes of the pulses and the threshold value exceeds a certain value. In contrast, Bleckmann simply switches from a first hysteresis threshold to a second hysteresis threshold in order to perform testing of the sensor (see the last two sentences of the Abstract; see col. 2, lines 36-42). The first hysteresis threshold is used for normal sensor operation. The second hysteresis threshold is used when sensor testing is being performed (col. 2, lines 26-34). Bleckmann makes this clear with his statement “[t]o prevent the sensor from being inadvertently operated at the limits of its maximum permissible air slot, according to the present invention, the sensor inherent hysteresis threshold is changed over to the higher hysteresis threshold for testing purposes.” (emphasis added, Bleckmann Abstract, second to last sentence). Once the sensor testing is complete, the system is switched back to use the first hysteresis threshold (col. 2, lines 48-56). Therefore, Bleckmann simply discloses switching from a first hysteresis threshold that is used for nominal sensor operation, to a second hysteresis threshold that is used for sensor testing, in response to a test signal such as a high input voltage value (see col. 2, lines 37-40). Specifically, Bleckmann merely discloses setting the hysteresis threshold depending upon whether or not the system is in test mode. Accordingly, a fair and proper reading reveals that Bleckmann never computes the difference between the threshold signal and a signal indicative of the pulse amplitude in order to control the threshold.

A 35 U.S.C. §102 rejection requires that a single reference teach each and every element of the claimed invention. Hence, Bleckmann is incapable of anticipating claim 1 since it fails to disclose (or even suggest) *“comparing the amplitude of the pulses of the pulse train output signal with a first variable switching threshold value; adjusting said switching threshold value when the difference between the amplitudes of the pulses and said switching threshold value exceeds a fixable first maximum value.”* (cl. 1).

Claim 20 has been added. Bleckmann is also incapable of anticipating claim 20 since it fails to disclose (or even suggest) *“comparing the amplitude of the pulses of the pulse train output signal with a variable threshold value; and adjusting said variable threshold value to maintain the difference between the amplitudes of the pulses and said variable threshold value less than a first value.”* (cl. 20, emphasis added).

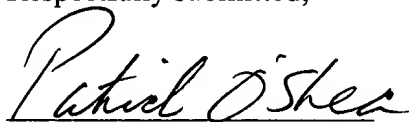
3. The indication that claims 5-7, 11-13 and 15-19 contain allowable subject matter is noted and appreciated.

These claims have not been written into independent claim format since claim 1 is patentable for at least the reasons set forth above.

For all the foregoing reasons, reconsideration and allowance of claims 1, 5-7, 11-13 and 15-20 is respectfully requested.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,

A handwritten signature in cursive script, reading "Patrick J. O'Shea".

Patrick J. O'Shea
Reg. No. 35,305
Samuels, Gauthier & Stevens, LLP
225 Franklin Street, Suite 3300
Boston, MA 02110
(617) 426-9180, Ext. 121